

RECLAMATION

Managing Water in the West

U.S. Department of the Interior
Bureau of Reclamation

— Comment Card —

COMMENTS DUE BY WEDNESDAY, FEBRUARY 28, 2007

PLEASE PRINT

Date: 1/31/07

Name: ERNIE & DIANE KINZLI Title (if applicable): —

Telephone: 831-462-4665 Fax: 831-462-6531

Organization/Business (if applicable): ERNIE'S OASTING POND E-Mail: ernies@ernies.com

Address: 4845 SOQUEL DR

City: SOQUEL State: CA Zip: 95073

☐ Yes, I would like to be added to your mailing list: E-Mail ☐ US Mail ☐

The Bureau of Reclamation is seeking public comment on the adoption of a Long-Term Experimental Plan for the future operation of Glen Canyon Dam and other associated management activities. Your input on the scope of the project and the issues and alternatives that should be analyzed is greatly appreciated. Please write legibly.

Lee's Ferry and the Colorado River are special places for everyone. The beauty of the canyon is hard to describe in mere words. When seen, especially as we have seen it while floating the Colorado river is a pleasure that we hope to be able to pass on to many more of our family members and acquaintances for years to come. The enjoyment of catching and releasing a beautiful trout amid the splendor of the canyon is forever in one's memory. To try to erase those memories for future generations would be a huge mistake. We are against any prevention of banning trout fishing on the Colorado River at Lee's Ferry

Sincerely

Ernest and Diane Kinzli

Please submit your comments in the space provided, fold the card in half, tape the edges, and mail the completed card back to:
Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State Street, Salt Lake City, Utah 84138-1147.
Comments must be received by February 28, 2007.



United States Department of Interior
Fish and Wildlife Service
Albuquerque, NM 87103
Phone: 505-248-6920 Fax Number: 505-248-6922/6788

Fax Cover Sheet

Date: 3/20/07

To: Regional Director

Agency: Bureau of Reclamation

Fax Number: 801-524-3858

Phone: _____

Number of Pages: _____, including this cover sheet

From: _____

Agency: Ecological Services, Regional Office, Region 2

Remarks: _____



United States Department of the Interior

FISH AND WILDLIFE SERVICE

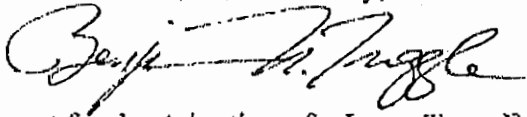
P.O. Box 1306
Albuquerque, New Mexico 87103
<http://ifw2es.fws.gov>

In Reply Refer To:
R2/ES-HC/EC

MAR 20 2007

Memorandum

To: Regional Director, Bureau of Reclamation, Salt Lake City, Utah

From: Regional Director, Region 2 

Subject: Environmental Impact Statement for the Adoption of a Long-Term Experimental Plan for the Future Operation of Glen Canyon Dam and Other Associated Management Activities

We appreciate the opportunity to provide comments for your consideration on scoping for the subject Environmental Impact Statement (EIS). We understand that you would like comments relative to the scope of your analysis for the subject EIS in regard to the issues and alternatives to be analyzed during this National Environmental Policy Act process. We also understand that you plan to initiate formal consultation pursuant to section 7 of the Endangered Species Act (ESA) on this action when a draft EIS is completed. Our comments concern four areas we request be included in the scope of analysis of the subject proposed action: 1) testing the effects of varying operating criteria at Glen Canyon Dam in an experimental context to determine a more beneficial operation for species listed under ESA, including humpback chub *Gila cypha*; 2) the potential installation and testing of a selective withdrawal structure or Temperature Control Device (TCD) at Glen Canyon Dam; 3) other related "non-flow" and "ancillary" actions that may be undertaken to benefit species listed under the ESA as part of the subject action; and, 4) the need to coordinate this EIS process with the Bureau of Reclamation's (Reclamation) ongoing effort to develop an EIS for the Colorado River Interim Guidelines for Lower Shortages and Coordinated Operations for Lake Powell and Lake Mead.

As a member of the Glen Canyon Dam Adaptive Management Program (AMP), we have worked with you to develop the experimental options recommended to the Secretary of the Interior by the AMP Adaptive Management Work Group (AMWG) and Technical Work Group. As you know, one of the options forwarded by the AMWG to the Secretary was developed in concert by the Department of the Interior (DOI) agencies (Reclamation, National Park Service, Fish and Wildlife Service (Service), and the Bureau of Indian Affairs) and is most recently summarized in the 2006 document prepared by the Grand Canyon Monitoring and Research Center entitled "Assessment of the Estimated Effects of Four Experimental Options on Resources Below Glen Canyon Dam." In brief, this option includes elements of daily flow variation from Glen Canyon Dam similar to the Modified Low Fluctuating Flow (the preferred alternative in the 1995 Glen

Canyon Dam Environmental Impact Study), but also includes increased fluctuating flows in the winter, increased ramping rates in some months, and steady flows in September and October. This option also includes provisions for Beach Habitat Building Flows and a titration experimental approach with additional treatments in later periods, including a TCD and steady flows in August, as necessary.

We continue to support the DOI option because we believe it will support recovery of humpback chub while also providing benefits to other resources, and provide an experimental approach to evaluate the effects of different management scenarios on the Colorado River ecosystem. However, we concede that the process utilized to develop the experimental options was flawed. We believe that more time, effort, and science should be utilized in developing the Long-Term Experimental Plan (LTEP). We recommend that existing physical and biological models be utilized, and if possible, expanded into an ecosystem model to better test the potential outcomes of various options. We also recommend that the concept of testing, in a titration experimental design, the effects of increasing periods of steady flow in the autumn and summer months on the survival and recruitment of humpback chub, be included as part of any option. As you know, the best currently available science indicates that steady flows, particularly in the summer and fall, may provide improved conditions for rearing juvenile humpback chub in the mainstem Colorado River; lack of recruitment of juvenile humpback chub into the adult spawning population is thought to be the primary cause of humpback chub decline in Grand Canyon. Experimental flows should also include research on the effects of flows on nonnative fish abundance and their effects on native fish including humpback chub. We further recommend that any option also include, as the DOI option does, a biological trigger, based on numbers of humpback chub in the Grand Canyon population and the population trend of humpback chub, such that if the population declines to the trigger or below the trigger, the Reclamation would immediately reinitiate consultation with the Service to determine a course of action to reverse the decline that would include evaluation of expanded steady flow periods.

The DOI option also includes testing a TCD, or more specifically, a two-unit TCD to be operational in water year 2012, operating at full capacity from May through October. A TCD must be thoroughly evaluated prior to building and testing, and again the use of a well-developed ecological model is a necessary component. We recommend that Reclamation do this as part of this EIS process. An important element will be to examine the potential for increased numbers of nonnative aquatic species, especially nonnative warm-water fish species, as well as nonnative Asian fish tapeworm *Bothriocephalus acheilognathi*, and the negative consequences this may have on humpback chub and other native fish. We recommend that, regardless of the outcome of this EIS process, you continue to work with us to develop refuge populations of humpback chub at several facilities to offset the risks. The need to evaluate the effects of a TCD on invasive aquatic species, as well as a number of other substantive issues, were raised during your prior scoping effort and are well summarized in your June 7, 2004, report entitled "Scoping Report for the Glen Canyon Dam Proposed Temperature Control Device Environmental Assessment." We request that this report be incorporated into the scope of analysis for the LTEP EIS. Again we stress that the focus be on evaluation of the TCD via scientific study including ecological modeling prior to construction.

The DOI option included "non-flow" and "ancillary" actions, such as control of nonnative fishes. As you know, mechanical control has proven to be an effective method for reducing cold water nonnative fishes, and efforts are being implemented to develop control methods for warm water nonnative fishes as well. We recommend you continue to consider these elements as part of the LTTP. We refer to the discussion of these elements in the definition of Option C, the DOI option, in the "Assessment of the Estimated Effects of Four Experimental Options on Resources Below Glen Canyon Dam." We also recommend that you consider the "Comprehensive Plan for the Management and Conservation of Humpback Chub *Gila cypha* in the Lower Colorado River Basin", currently under development by the AMP, for a complete and current list of projects to include. Finally, we recommend that you strive to implement all of the actions defined in the plan for the conservation of humpback chub as part of the LTTP. This document should be completed by the AMP in time to be utilized early in the EIS process.

We are also working with you as a cooperating agency on the development of an EIS for the Colorado River Interim Guidelines for Lower Shortages and Coordinated Operations for Lake Powell and Lake Mead. As you know, this effort has significant implications for the operation of the lower Colorado River, and for the operation of Glen Canyon Dam. We strongly recommend close coordination between development of the LTTP EIS and the EIS for Lower Shortages, as any modification of Glen Canyon Dam operations resulting from one could clearly affect the other. The LTTP EIS should include a thorough analysis of how the new Shortage Guidelines will affect implementation of the LTTP.

Finally, we believe that this EIS needs to include analysis and subsequent recommendations for fish and wildlife resources pursuant to the intent of the Fish and Wildlife Coordination Act (FWCA). Such analysis and recommendation development would include addressing the aspects of this EIS as it relates to development and adoption of a LTTP that will implement a structured, long-term program of experimentation including dam operations, modifications to intake structures, and other non-flow management actions. We look forward to working with you to develop research protocols to address flow and fish relationships. Specifically, FWCA work would include flow modeling analyses that assess potential responses to warm water and cold water releases from a TCD and responses from cold water and warm water fish and parasites and/or disease organisms that could impact humpback chub and other native fish and the recreational trout fishery at Lees Ferry. Additional analyses from this coordination will allow us to maximize our understanding of both the potential positive and negative impacts that could result from operation of the proposed TCD. The analyses should provide information to assist in addressing both endangered species and recreational fisheries concerns.

We look forward to continuing to work with you on this important effort as a cooperating agency. For more information, please contact Sam Spiller, Lower Colorado River Coordinator, at 602-841-5329, Email sam_spiller@fws.gov.

cc: Supervisor, Ecological Services Field Office, Phoenix, AZ
 Lower Colorado River Coordinator, Ecological Services Field Office, Phoenix, AZ
 Project Leader, Arizona Fishery Resources Office, Pinetop, AZ
 Director, Arizona Game and Fish Department, Phoenix, AZ
 Director, California Department of Fish and Game, Sacramento, CA
 Director, Nevada Department of Wildlife, Reno, NV

From: <fjkoster@aol.com>
To: <GCDExpPlan@uc.usbr.gov>
Date: Fri, Feb 2, 2007 4:04 PM
Subject: LTEP EIS Scoping Comments

Dear Mr. Gold,

Thank you for the opportunity to submit the following scoping comments for the Environmental Impact Statement on the Long-term Operations for the future operations of Glen Canyon Dam. The river ecosystem in Grand Canyon National Park has suffered immensely over the past forty years due to the operations of Glen Canyon Dam, and it's vital that a fresh look at the problem be undertaken. I have concerns, however, that the EIS as envisioned is destined to fail in this regard unless a number of critical issues are addressed.

First, I would like to express my tremendous dismay with the Department of Interior's mishandling of the recovery efforts in Grand Canyon National Park over the past 40 years, and that the information presented so far by the Bureau of Reclamation indicates that this EIS promises more of the same.

While new plans for ongoing investigation and experimentation can be beneficial, they are useless amidst a backdrop where the commitment to implement those plans is virtually non-existent. We've already experienced this with the completion of the first EIS twelve years ago, and there's nothing outlined in the purpose and need for this EIS process to indicate things will be any different once this process concludes. For this exercise to yield any meaningful outcome, the EIS process must be reconceived incorporating the following:

1. Restructuring the focus of the EIS on the recovery.

The principal objective should not be the long-term operation of Glen Canyon Dam, but the ingredients necessary to bring about the recovery and preservation of endangered species within the Colorado River corridor of Grand Canyon National Park. While such objectives may not be mutually exclusive, this has yet to be proven, and as such, one should precede the other. The focus must first address the ingredients necessary to restore the natural process to Grand Canyon's river ecosystem, and secondly how, and at what costs, can the Glen Canyon Dam/Lake Powell reservoir system be operated in order to achieve this. The restoration ingredients must include:

The return of river flows consistent with the Colorado River's natural discharge into Grand Canyon.

The re-establishment of a water temperature regime consistent with seasonal temperature variations of the Colorado River in Grand Canyon.

The re-establishment of sediment inputs into Grand Canyon consistent with the amount that would be received in a dam-free environment.

The elimination of non-native species, which have taken hold in the artificial riverine environment created by Glen Canyon Dam operations.

2. Evaluate the Decommissioning of Glen Canyon Dam.

The no-dam alternative must be evaluated as one means of achieving the restoration of the natural process necessary for the recovery and preservation of endangered species in Grand Canyon's river corridor. The no-dam alternative provides a valuable base line from which to evaluate other operational alternatives. Additionally, in light of the climate and human induced changes affecting flows into Lake Powell, and thus the viability of the dam to meet perceived water supply and hydroelectric benefits, BoR has additional incentive to examine a decommissioning or no-dam alternative consistent with the Council on Environmental Quality guidelines.

3. Replace the Working Groups of the Adaptive Management Program

Despite being given specific instructions twelve years ago as outlined in the 1995 EIS on Glen Canyon Dam operations, the Glen Canyon Dam Adaptive Management Program (AMP) has failed to deliver in almost every aspect, causing Grand Canyon's river ecosystem to endure further damage. Many of AMP's failings were spelled out in the United State's Geological Survey's SCORE Report of October 2005. It was precisely these failings that have compelled BoR to undertake this new EIS process as part of its settlement agreement with environmental groups last year. Absent any structural changes to the AMP, any recommendations coming out of this EIS process will be of little value, as there are no mechanisms to ensure they won't be ignored as were those from the EIS twelve years ago.

Dominated by water supply and hydroelectric power interests, it's not surprising that the AMP has been intransigent toward addressing the true needs for endangered species recovery in Grand Canyon. Scientific, not political and commercial interests, should be the sole advisors to the Secretary of Interior on how Grand Canyon's river ecosystem should be studied, monitored and managed consistent with the recovery objectives.

Therefore, the AMP should be replaced by an open source and independent body of research and advisory scientists, where the monitoring and research data are consistently and thoroughly peer-reviewed prior to formulating any recommendations to the Secretary of Interior.

We're closing in on 50 years of ecological destruction in Grand Canyon National Park due to the operations of Glen Canyon Dam. For much of this time the public has been asking that this be remedied. We continue to lose valuable time and species as the BoR procrastinates and resists the public's mandate to put the resource first. While there are plenty of substitutes to achieve the benefits Glen Canyon Dam may provide, there will never be another Grand Canyon. It's time for the BoR to stop thwarting the public's interest to protect it.

Sincerely,

Fred Koster
200 East 81st Street
New York, NY 10028

CC: <ltepcomments@livingrivers.org>

From: <garystudwell@earthlink.net>
To: <GCDExpPlan@uc.usbr.gov>
Date: Wed, Jan 31, 2007 2:20 PM
Subject: LTEP EIS Scoping Comments

Dear Mr. Gold,

Thank you for the opportunity to submit the following scoping comments for the Environmental Impact Statement on the Long-term Operations for the future operations of Glen Canyon Dam. The river ecosystem in Grand Canyon National Park has suffered immensely over the past forty years due to the operations of Glen Canyon Dam, and it's vital that a fresh look at the problem be undertaken. I have concerns, however, that the EIS as envisioned is destined to fail in this regard unless a number of critical issues are addressed.

First, I would like to express my tremendous dismay with the Department of Interior's mishandling of the recovery efforts in Grand Canyon National Park over the past 40 years, and that the information presented so far by the Bureau of Reclamation indicates that this EIS promises more of the same.

While new plans for ongoing investigation and experimentation can be beneficial, they are useless amidst a backdrop where the commitment to implement those plans is virtually non-existent. We've already experienced this with the completion of the first EIS twelve years ago, and there's nothing outlined in the purpose and need for this EIS process to indicate things will be any different once this process concludes. For this exercise to yield any meaningful outcome, the EIS process must be reconceived incorporating the following:

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Dominated by water supply and hydroelectric power interests, it's not surprising that the AMP has been intransigent toward addressing the true needs for endangered species recovery in Grand Canyon. Scientific, not political and commercial interests, should be the sole advisors to the Secretary of Interior on how Grand Canyon's river ecosystem should be studied, monitored and managed consistent with the recovery objectives.

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Sincerely,
Gary Studwell

Gary Studwell
424 Asbury St.
Houston, TX 77007

CC: <garystudwell@earthlink.net>, <ltepcments@livingrivers.org>

From: <jorgenegro@hotmail.com>
To: <GCDExpPlan@uc.usbr.gov>
Date: Fri, Jan 26, 2007 11:06 AM
Subject: LTEP EIS Scoping Comments

Dear Mr. Gold,

Thank you for the opportunity to submit comments for the Environmental Impact Statement on the Long-term Operations for Glen Canyon Dam. The river ecosystem in Grand Canyon National Park has suffered immensely during the past forty years, and it is urgent that a new look be undertaken. The EIS as envisioned is destined to fail in this regard unless a number of critical issues are considered.

The Department of Interior's mishandling of the recovery efforts in Grand Canyon National Park, and that the information presented so far by the Bureau of Reclamation indicates that this EIS promises more of the same.

Although new plans for ongoing investigation and experimentation may be beneficial, they are useless when the implementation of those plans is non-existent. This occurred with the completion of the first EIS twelve years ago, and there's nothing indicates things will be any different once this process is again concluded. The EIS process must be conceived to incorporate:

1. Restructuring the focus of the EIS on the recovery.

The principal objective is not the operation of Glen Canyon Dam, but rather what is necessary for the recovery and preservation of endangered species within Grand Canyon National Park. The focus must first address the restoration of natural processes to the Colorado River ecosystem, and secondly how, and at what costs, can the Glen Canyon Dam/Lake Powell reservoir system be operated in order to achieve this. The restoration ingredients must include:

The return of river flows consistent with the Colorado River's natural discharge into Grand Canyon.

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The elimination of non-native species, which have taken hold in the artificial riverine environment created by Glen Canyon Dam operations.

2. Evaluate the Decommissioning of Glen Canyon Dam.

3. Replace the Working Groups of the Adaptive Management Program.

Sincerely,

George C. Simmons

George C. Simmons
1974 North Port Court
Grapevine, TX 76054

CC: <jorgenegro@hotmail.com>, <ltepcomments@livingrivers.org>

RECLAMATION

Managing Water in the West

U.S. Department of the Interior
Bureau of Reclamation

— Comment Card —

COMMENTS DUE BY WEDNESDAY, FEBRUARY 28, 2007

PLEASE PRINT

Date: January 2, 2007

Name: Gerald R. Zimmerman Title (if applicable): Executive Director

Telephone: (818) 500-1625 Fax: (818) 543-4685

Organization/Business (if applicable): Colorado River Board of California E-Mail: gr.zimmerman@crb.ca.gov

Address: 770 FAIRMONT Avenue, Suite 100

City: Glendale State: CA Zip: 91203-1068

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The Bureau of Reclamation is seeking public comment on the adoption of a Long-Term Experimental Plan for the future operation of Glen Canyon Dam and other associated management activities. Your input on the scope of the project and the issues and alternatives that should be analyzed is greatly appreciated. Please write legibly.

Comments will be furnished at a later date.

Please submit your comments in the space provided, fold the card in half, tape the edges, and mail the completed card back to:
Regional Director, Bureau of Reclamation, Upper Colorado Region, Attention: UC-402, 125 South State Street, Salt Lake City, Utah 84138-1147.
Comments must be received by February 28, 2007.

COLORADO RIVER BOARD OF CALIFORNIA

770 FAIRMONT AVENUE, SUITE 100

GLENDALE, CA 91203-1035

(818) 500-1625

(818) 543-4685 FAX

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FEB 21 '07

February 15, 2007

Mr. Rick Gold
Regional Director
U.S. Bureau of Reclamation
Upper Colorado Region, Attn. UC-402
125 South State Street
Salt Lake City, Utah 84138-1147

Class	ENT 611	
Pri	GC	
Cntr #	3834072	
Fldr #	UC13046	
DATE	Initial	To
		902

Dear Mr. Gold:

The purpose of this letter is to provide the Bureau of Reclamation (Reclamation) with the Colorado River Board of California's (CRB) preliminary comments regarding the National Environmental Policy Act (NEPA) process that has been established associated with Reclamation's development of an environmental impact statement (EIS) for the proposed Glen Canyon Dam Long-Term Experimental Plan (LTEP). In the *Federal Register* notices, published on November 6, 2006, and December 12, 2006, respectively, Reclamation announced its intent to solicit information that can be utilized in the public scoping portion of the NEPA process. This letter is intended to provide Reclamation with the CRB's scoping comments.

As you are aware, a meeting of the Glen Canyon Adaptive Management Work Group (AMWG) was held in Phoenix, Arizona, on December 5-6, 2006. At that meeting the AMWG adopted a motion regarding the proposed scope of the Glen Canyon Dam LTEP. It is our understanding that this motion, which was supported by California's representative on the AMWG, will be forwarded to the Secretary of the Department of the Interior. That motion is as follows:

"AMWG recommends that the Secretary of the Interior consider the following scope in developing the Long-Term Experimental Plan EIS:

The alternatives should maintain the balance of benefits to all resources as described in the ROD of the Glen Canyon Dam EIS, while focusing on humpback chub and sediment resources. Insofar as they are consistent with this balance and focus, the elements of the alternatives should:

- Include a range of flow events, patterns, and timing;
- Include non-flow experiments;
- Be based on credible science planning;
- Maximize hydropower capacity and flexibility to the extent possible; and
- Address cultural resources.

The experiments in the plan should be of adequate (but not excessive) duration to allow determination of actions needed to sustain and, where possible, improve key resources and the balance of benefits to all resources.

The AMWG also forwards to the Secretary for consideration, four options (i.e., GCMRC, 2006, Assessment of the Estimated Effects of Four Experimental Options on Resources below Glen Canyon Dam, table E-1, page 3, USGS, Flagstaff) and the Modified Low Fluctuating Flow regime from the Glen Canyon Dam EIS ROD, as examples of mixtures of flow and non-flow experiments that have been rigorously debated within the Glen Canyon Dam Adaptive Management Program.”

This position, adopted by the AMWG at its December 6th meeting, is still the position of the CRB. Additionally, the CRB notes that Section 1802 of the 1992 Grand Canyon Protection Act (P.L. 102-575) requires consistency in the establishment and implementation of long-term monitoring programs and activities by directing that

“The Secretary shall operate Glen Canyon Dam in accordance with the additional criteria and operating plans specified in section 1804 and exercise other authorities under existing law in such a manner as to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, including, but not limited to natural and cultural resources and visitor use.”

and that

“The Secretary shall implement this section in a manner fully consistent with and subject to the Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the Supreme Court in *Arizona v. California*, and the provisions of the Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 that govern allocation, appropriation, development, and exportation of the waters of the Colorado River basin.”

Additionally, the CRB requests that Reclamation recognize and consider that a separate NEPA/EIS process, associated with Development of Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead under Low Reservoir Conditions, is being prepared. Since this latter process is scheduled to be completed a year ahead of the LTEP EIS process, the CRB recommends that Reclamation consider the annual flow regimes for the releases from Glen Canyon Dam that are being considered in that process, as potential alternatives for the LTEP EIS process are developed and evaluated. This would avoid potential conflicts with the NEPA process already under way and permit Reclamation to incorporate the Record of Decision from that process, once it is issued, into the LTEP EIS process.

Mr. Rick Gold, Regional Director
February 15, 2007
Page 3

Finally, the CRB requests that Reclamation continue to provide it with information regarding the status of the NEPA process and the results of the public scoping process. The CRB appreciates the opportunity to provide these preliminary comments, and looks forward to providing additional comments when the draft LTEP EIS is released. Please feel free to contact me at (818) 500-1625 if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald R. Zimmerman", written in a cursive style.

Gerald R. Zimmerman
Executive Director

ORIGINAL



OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

MAR 01 2007

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Mr. Rick L. Gold
Regional Director
Bureau of Reclamation
Upper Colorado Region
Attention: UC-402
125 South State Street
Salt Lake City, Utah 84138-1147

Dear Mr. Gold:

Thank you for the opportunity to comment during this scoping process on the intent to prepare an Environmental Impact Statement (EIS) on the ecosystem downstream of Glen Canyon Dam and operations and structures at the dam. The letter to interested parties dated January 19, 2007, states the EIS process will be on adoption of a long-term experimental plan. The information in the letter and at the project website suggests the focus would be on proposed modified structures and operations at the dam and on the downstream Glen and Grand Canyons of the Colorado River. The United States Section, International Boundary and Water Commission (USIBWC), notes that the Grand Canyon Protection Act is summarized in the website and states that the Act requires protection of downstream resources while complying with water delivery requirements (Treaty, Compact and Statute). The USIBWC is charged through various treaties and international agreements to evaluate the relationship of projects to international obligations of the United States. The following comments and information are for your consideration.

The International Boundary and Water Commission (IBWC) is responsible for applying the boundary and water treaties between the two countries and settling differences that arise in the application of the treaties. The United States Section carries out the activities in the United States resulting from obligations and rights assumed with the Government of Mexico in accordance with these treaties and related agreements. The USIBWC duties include review of projects on resources in the U.S. and effects potentially crossing into Mexico.

Within the Colorado River watershed, the Treaty Relating to the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande (1944 Water Treaty) and several related agreements merit consideration. As noted in the website, in accordance with the 1944 Water Treaty, the United States delivers 1.5 million acre-feet of Colorado River water annually to Mexico. The treaty also states that when there is water surplus to United States uses, an additional volume of up to 200,000 acre-feet/year may be delivered.

Under the Treaty of February 3, 1944 Water Treaty for the "utilization of waters of the Colorado and Tijuana Rivers and of the Rio Grande," the two governments entrusted the IBWC to give attention to salinity control. Minute No. 242, a binding agreement of the IBWC, United States and Mexico, controls the salinity of Colorado River water delivered to Mexico. The Minute also

provides for limits on groundwater pumping within five miles of the international boundary near San Luis, Arizona, and for consultations between the two countries prior to undertaking any new development of the surface or groundwater resources, or undertaking substantial modifications of present developments in the border area, that might adversely impact the other country.

Commission Minute No. 306 provides for cooperation between the two countries in the development of studies and recommendations regarding the ecology of the Colorado River limitrophe and delta.

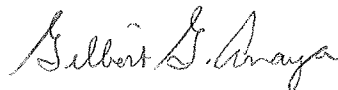
These agreements are all available on the USIBWC web page at www.ibwc.state.gov.

The USIBWC is the primary federal agency responsible for promoting the identification, investigation, and resolution of transboundary and boundary water technical issues along the United States and Mexico border region. The USIBWC carries out its statutory responsibilities through binational cooperation and in partnership with other entities. The United States Government gives limited technical investigative authority to USIBWC.

Please keep the USIBWC informed on the EIS process, and of any future projects that may be associated with the international border region. Thank you again for the opportunity to review and comment on the scoping information on preparation of an EIS.

If you have any questions regarding these comments, please call me at (915) 832-4702 or contact R. Steve Fox, Environmental Protection Specialist, at (915) 832-4736.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gilbert G. Anaya". The signature is fluid and cursive, with the first name being the most prominent.

Gilbert G. Anaya
Supervisory Environmental Protection Specialist
Environmental Management Division

From: "Glenn O. Clark" <gclark@infomagic.net>
To: <GCDExpPlan@uc.usbr.gov>
Date: Mon, Feb 26, 2007 11:41 AM
Subject: points to consider

Dear Folks:

In your planning efforts there are environmental considerations that I am sure you are aware of and will place within your plan. Namely, these are the following:

Maintain flows periodically that have the beneficial effect of restoring sediments for the natural rhythms of the River to benefit endemic species.
Maintain flows of the River periodically that creates variable water temperatures for the benefit of endemic species.
Maintain flows of the River that are beneficial to threatened and endemic species.
Organize and fund cooperative campaigns to eradicate non-native species, especially those that prey on and compete with endemic species.

Thank you for accepting my comments on your important planning efforts.

Glenn O. Clark

From: "Gregory J Reis" <gregorreis@schat.net>
To: <GCDExpPlan@uc.usbr.gov>
Date: Sat, Feb 24, 2007 1:41 PM
Subject: UC-402 Scoping Comments on Glen Canyon Dam EIS

Mr. Rick Gold

Regional Director

Bureau of Reclamation

Upper Colorado Region

Attn: UC-402

125 South State Street

Salt Lake City, UT 84138-1147

Subject: Scoping Comments on Glen Canyon Dam EIS

Dear Mr. Gold:

Thank you for allowing me the opportunity to submit scoping comments for the Environmental Impact Statement on the Long-term Operations for the Future Operation's of Glen Canyon Dam. Studies completed in 1996 by the Bureau of Reclamation and other Federal, State, Tribal and academic entities documented that the river ecosystem has been significantly impacted since 1956 due to the operations of Glen Canyon Dam. The 1996 Record of Decision and the Grand Canyon Protection Act promised that the river environment of the Grand Canyon would improve. Unfortunately we continue to see a decline in the ecological integrity of the river system.

It is unclear from the information presented in the scoping meetings how the implementation of the Long-term operations plan will remedy or rectify the situation that exists today. The new plans for ongoing investigation and experimentation may be beneficial for gathering new data however it is unclear how this information will be integrated and implemented into changes in the Glen Canyon Dam operations that will allow for listed fish species to recover.

The following comments should be implemented in order to allow for a future in the Glen Canyon, Grand Canyon, and Colorado River Delta that meets the requirements of the Grand Canyon Protection Act, Endangered Species Act, International Migratory Bird Treaty, NAFTA, Public Trust Doctrine, Water Law, NEPA, and other applicable laws.

1. Restructure the Focus of the EIS on Native Fish Recovery.

Of the four endangered fish species that historically existed in the Grand Canyon, only the humpback chub remains. Three of the native listed fish species have been extirpated from the Grand Canyon and the humpback chub remains however population numbers have dropped to perilously low levels. When evaluating the long-term experimental plan for the future operations at Glen Canyon Dam it is important that the information learned be applied to protecting and restoring the species and habitats in the Grand Canyon. It is clear from data collected by the Grand Canyon Monitoring and Research Center that continuing operation business as usual will continue to lead to negative impacts in the Grand Canyon. Therefore it is recommended that a new suite of operation options be included in the review in the EIS:

- * An evaluation of a natural flow regime operation scenario.
- * The implementation and re-establishment of a water temperature regime consistent with seasonal temperature variation for the Colorado River in Grand Canyon.
- * The implementation and re-establishment of seasonal sediment inputs into Grand Canyon at a level that would provide cover for native fish and provide for the build up of sands and silts necessary for building beaches and backwater habitats.
- * Aggressive non-native species control including plants, birds, and fish.

In addition, the costs of decommissioning the dam at the end of its useful life should be considered, and compared to the costs of doing so now. Such an analysis should include the astronomical costs of species extinctions in a future decommissioning. I argue that a fair and balanced analysis would show that the benefits of continuing to operate the dam are far outweighed by the costs, and it would save everyone time, money, and water to drain the reservoir now and decommission the dam now, before further environmental impacts occur. Restoration efforts around the west all show that it is far less expensive to prevent ecosystem damage than to try to repair it--and the repairs often result in a lower-quality environment than prior to the damage. The scale of damage involved here makes it even more urgent that the dam's negative effects be abated as soon as possible. USBR has had 50 years already to try and get things right--the time for acknowledging failure and putting a stop to the ineffective fixes is overdue.

2. Impacts on Lake Powell and Glen Canyon

The anticipated management of the Colorado River includes a large probability that flow regimes will be reduced due to reduced snowpack and lowered runoff volume. This probability should be acknowledged in the EIS

and addressed through alternative scenarios for evaluation of the impacts to the Grand Canyon environment. Changes in the operations of Glen Canyon Dam will have a direct and immediate impact on flow patterns. The long-term monitoring plan should address how this potential will be addressed. Specific recommendations include:

- * Identify potential flow regimes that may occur as a result of changing drought operation patterns at Glen Canyon Dam.
- * Identify potential changes in the elevation levels of Lake Powell and how this will potentially impact the limnological conditions in the reservoir and the resulting quantity and quality of releases to the Grand Canyon.

The sedimentation and evaporation in the reservoir must also be addressed. In the desert southwest where water is scarce and alternative sources of electricity are abundant, wasting water through evaporation in order to generate electricity makes no sense and is a waste of public resources and a breach of the public trust. Storing water in this reservoir also damages archaeological sites and other natural features of the Glen Canyon National Recreation Area. The Bureau should consider setting an upper limit on reservoir levels in order to protect these resources and conserve water. I suggest an upper limit in the range of 20-40% of capacity might be appropriate, however studies should be done in order to set the optimum limit.

3. Long-Term Experimental Plan

The long term should provide the basis for each scientific study that is to be conducted in the Grand Canyon and in Lake Powell. Special interest science can be as bad as special interest decisions in that critical research and data collection is not collected, often at the loss of more important information. Specific actions that should be included in the EIS include:

- * Is the USGS the appropriate entity to run the science program in the Grand Canyon?
- * Identification and priority of research. It should be inherently clear and transparent as to how specific science programs are agreed to and the process to get timely data to decision-makers.
- * Adequacy of support to Native American tribes in protecting their resources in the Grand Canyon.

4. Adaptive Management Program

The Glen Canyon Dam Adaptive Management Program was administratively initiated when the Record of Decision was signed by Secretary of Interior Babbitt in the fall of 1996. The intent of the program was to build on the success of the Glen Canyon Environmental Studies and to more fully integrate operational decisions at the dam with the increasing scientific information. In October 2005 the U.S. Geological Survey's SCORE report on the success of the Adaptive Management Program was reviewed. The SCORE review did not reflect favorably on the Adaptive Management Program IF the intent was to meet the requirements of the Grand Canyon Protection Act and the intent of the EIS.

Of concern with the Adoption of a Long-Term Experimental Plan for the Future Operations of Glen Canyon Dam is that it appears that the SCORE report has not been taken into consideration or actions to resolve some of the primary scientific issues identified. The current set up of the Science Program and identified review process does not take into consideration that we cannot continue business as usual if we are to meet the requirements of the Grand Canyon Protection Act and the recovery of species and their habitats in the Grand Canyon.

The EIS scope should include the following:

- * An independent review of the existing Adaptive Management Program with recommendations of actions necessary to make it more effective.
- * A review of the current peer-review process and Scientific Advisory Program. The concept of "conflict of interest" should be addressed to the program head and the group involved in the review.
- * A revision of the membership organization for the Adaptive Management Program to provide balance between development and management interests and conservation interests. The current organization is unfairly tipped in the favor of water and power special interest groups.

The Grand Canyon Protection Act (1992) and the initial EIS on Glen Canyon Dam in 1996 provided a great opportunity for Reclamation to step forward and be a leader in the management of the Colorado River. The past ten years have not provided the information or the process that was envisioned in 1996 and needs to be reviewed and revised in the current EIS process.

5. Colorado River Delta Impacts

The annual flow of water to the Colorado River Delta was significantly reduced when Powell Reservoir began filling. Thus, there is a clear connection between the operation of the dam and the conditions in the delta. The impacts of the dam on the delta must be fully analyzed and disclosed to the public and a plan for mitigation must be implemented. The delta provides internationally important wildlife habitat to migratory birds. These birds

also depend on areas such as the Salton Sea, which have temporarily mitigated this loss. As the Salton Sea's ability to mitigate the loss of the delta declines, it becomes more urgent that the impacts on the delta from Glen Canyon Dam be abated and the delta ecosystem be restored so that there is no net loss of habitat. A 1-year study satellite-tracking migratory birds in the delta would show the extent of the cumulative impacts that are threatened by the continued operation of Glen Canyon Dam. I believe such a study would show that there is no substitute for a healthy Colorado River Delta and that it must be saved.

Thank you for consideration of these comments.

Sincerely,

Gregory J. Reis

Restoration Practitioner & Environmental Professional

P.O. Box 41

Lee Vining, CA 93541

CC: <info@glencanyon.org>

From: "Harold Sersland" <seenviro@msn.com>
To: <GCDExpPlan@uc.usbr.gov>
Date: Sun, Feb 4, 2007 2:27 PM
Subject: Long-Term Experimental Plan EIS

Dennis,

My name is Harold Sersland and I'm working for the Utah Division of Water Resources on the Engineering Planning and Environmental Studies for the Lake Powell Pipeline(LPP) Project. I'm responsible for the over site of the environmental studies. MWH has been contracted to the actual Engineering and Environmental work.

As you may know the LPP would pump water out of Lake Powell and with the BR studies on a multilevel intake system I would like to be added to the mailing list for study activity, information and EIS actions. The water quality at the various levels in the Lake will be affected by the BR selected intake levels and there for of interest to the LPP and possibly setting our intake elevations.

If you have any questions please let me know. Harold

From: "Harold Sersland" <seenviro@msn.com>
To: "GCDExpPlan GCDExpPlan" <GCDExpPlan@uc.usbr.gov>
Date: Mon, Feb 5, 2007 8:36 PM
Subject: Re: Long-Term Experimental Plan EIS

Jayne,

What a small world, I see Terry at the BLM State office quite often as I'm coordinating the Lake Powell Pipeline Project with folks in that office. Must tell you it brings back some great memories. Good to be working with you again.

I live a scitsofrentic exsistance in that I'm a Nevada residence living in Mesquite some time and have a home in Sandy where most of my mail goes cause there is some one there all the time. So, mail goes to Sandy, 9140 Nichole Dr. Sandy, UT 84093.

What kind of video's has the BR done on rivers or linear facilities like canals or ? We are going to video the pipeline alternatives as we know them today for public involvement meetings. The pipeline is about 130 miles long so we would try to get every foot of it but segments that are representative of the alignments. Like who has the BR used to do your work?

Best, Harold

----- Original Message -----

From: GCDExpPlan GCDExpPlan<mailto:GCDExpPlan@uc.usbr.gov>
To: seenviro@msn.com<mailto:seenviro@msn.com>
Sent: Monday, February 05, 2007 10:23 AM
Subject: Re: Long-Term Experimental Plan EIS

Hey Harold - How are you? This is Jayne Kelleher commenting from my alias account set up for public comment. I am coordinating this EIS with Randy Peterson. I would be happy to add you to our mailing list. Could you please send me your exact address? How are you doing? Nice to talk with you.

JK

>>> "Harold Sersland" <seenviro@msn.com<mailto:seenviro@msn.com>> 2/4/2007 2:25:35 PM >>>

Dennis,

My name is Harold Sersland and I'm working for the Utah Division of Water Resources on the Engineering Planning and Environmental Studies for the Lake Powell Pipeline(LPP) Project. I'm responsible for the over site of the environmental studies. MWH has been contracted to the actual Engineering and Environmental work.

As you may know the LPP would pump water out of Lake Powell and with the BR studies on a multilevel intake system I would like to be added to the mailing list for study activity, information and EIS actions. The water quality at the various levels in the Lake will be affected by the BR selected intake levels and there for of interest to the LPP and possibly setting our intake elevations.

If you have any questions please let me know. Harold

From: "Harry L Newman" <hlnewman@commspeed.net>
To: <GCDExpPlan@uc.usbr.gov>
Date: Fri, Feb 23, 2007 9:46 AM
Subject: Glen Canyon Dam

Mr. Rick Gold
Regional Director, Bureau of Reclamation
Upper Colorado Region
Attn: UC-402

It is vital that the Environmental Impact Statement that you are preparing regarding the Colorado River within the Grand Canyon deals with the restoration of flow regimes that properly transport sediment and nutrients and the restoration of seasonally variable water temperatures. It is also important to focus on the recovery of all animal and plant species known to be native to the Grand Canyon prior to the operation of Glen Canyon Dam.

Thank you.

Harry and Darlene Newman
220 Rockridge Drive
Sedona, AZ 86336

From: Heather Payne <helsimon@yahoo.com>
To: <GCDExpPlan@uc.usbr.gov>
Date: Wed, Feb 28, 2007 11:55 AM
Subject: Re: UC-402

1300 Mason Farm Rd.
Chapel Hill, NC 27514
28 February 2007

Regional Director
Bureau of Reclamation, Upper Colorado Region
Attention: UC-402
125 South State Street
Salt Lake City, UT 84318-1147

To Whom It May Concern:

Please accept these comments on the Environmental Impact Statement (EIS) to develop a Long-Term Experimental Plan (LTEP) for Glen Canyon Dam.

As a scientist and someone who enjoys the Grand Canyon, I am concerned that the Bureau of Reclamation is creating the EIS and LTEP without sufficiently considering the impacts to the Grand Canyon. Therefore, I would request that the National Park Service serves as a joint lead agency for this EIS process. Given how much the Grand Canyon is directly impacted by Glen Canyon Dam operations, I strongly believe that any alternatives must meet the intent of the Grand Canyon Protection Act – and therefore must preserve ecosystems, protect native species, and preserve cultural resources. Any alternatives must also comply with the legal requirements to protect endangered species.

As someone who designs experiments regularly, I think it very important that at least a minimum of information is available with which to develop a longer term plan. Therefore, I request that a Beach Habitat Building Flow (BHBF) is conducted as soon as is reasonably possible to allow better inputs into the LTEP. The LTEP should be based on the scientific data that is already available, and the hypotheses tested must be scientifically credible. The LTEP should also include a complete and comprehensive socio-economic analysis of each option – not just hydropower, but to include impacts to recreation, local economies, tourism, and impacts where the financial cost cannot be calculated (clean air, water, habitat protection, etc.).

In addition, two common elements should exist within all alternatives: 1) BHBFs triggered by sediment levels and/or specific frequencies; and 2) the development of a Selective Withdrawal Device for temperature control and improved water quality.

Finally, I would hope that one of the alternatives should be the deconstruction of Glen Canyon Dam with the resumption of natural, normal, seasonal, non-dammed flows to the Grand Canyon.

Regards,
Heather Payne

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From: "Henry Gerdes" <hmgerdes@charter.net>
To: <GCDExpPlan@uc.usbr.gov>
Date: Mon, Feb 12, 2007 12:15 PM
Subject: Glen Canyon AMP

Dear Rick Gold, As a private river rafter, science teacher and business man, that has rafted the Grand Canyon 27 times starting in 1973, the following are my observations:

1. There is no way to return to the pre dam environment for the canyon. The dam is in place and is not likely to be removed.
2. The Humpback Chub and the Razorback Sucker are doomed. Any effort to save them below the dam, in the Colorado River is a waste of resources.
If people want to save them; remove them to some other river environment.
3. Not all non-native species are a bad thing for the river. Trout would be good Piranha would be bad. Any fish that is in Lake Mead and has the ability to swim up river will inhabit the Grand Canyon. Spending money to kill trout is a waste of resources and is in itself a degradation of the canyon.
4. A reasonable effort should be made to maintain a healthy environment below the dam. What can be done should be done. The charge of any peer-review committee should be to design a cost effective on going effort to maintain a healthy environment below the dam.
5. Eliminating gas engines, below the dam and above Diamond Creek, could be done and should be done.
6. The cost effectiveness of re-establishing of sediment flow, changing temperatures of the water and designing a flow regimen to maintain beaches should be evaluated by competent engineers and scientists.

Good luck with keeping everyone on task, under budget and in the real post dam world. Hank Gerdes,
Otis OR

CC: "Gary Lewandowski" <gary.lewandowski@gmail.com>, "David Chapman" <david_chapman@nps.gov>, "Tom Martin & Hazel Clark" <tomhazel@grand-canyon.az.us>, "Bruce McElya" <bmcelya@bellsouth.net>